



Department of Energy
Environmental Management
Policies and Procedures

Assessments

EM-4.1
Revision 0

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1.0 PURPOSE

The purpose of this procedure is to define a systematic process for conducting assessments of Department of Energy Oak Ridge Operations Environmental Management (ORO EM) projects, programs, and management systems. The goal of ORO EM assessments is to ensure that contractor and internal ORO EM activities are conducted in accordance with defined requirements and expectations.

2.0 SCOPE

2.1 The scope of assessments covered by this procedure includes:

- (a) Audits, technical assessments, surveillances, and inspections of contractor operations which ensure that ORO EM performance requirements are met, and
- (b) Self assessments of ORO EM management and office operation processes which ensure that DOE staff are effectively administering the Oak Ridge EM Program in a safe, compliant, and cost effective manner.

2.2 This procedure applies to all DOE EM and EM support staff (including support service contractors) performing EM assessments of ongoing activities. Readiness reviews and assessments to verify readiness for project start-ups are covered in a separate ORO EM procedure (see **EM-4.3, *Readiness Evaluations***).

3.0 REFERENCES AND DEFINITIONS

3.1 REFERENCES

- 3.1.1 EM-5.5 *EMS Standard*
- 3.1.2 EM-6.2 *Document Control*
- 3.1.3 DOE Order 414.1, *Quality Assurance*

3.2 DEFINITIONS

- 3.2.1 Assessment: As used in this procedure, the term assessment may represent audits, technical assessments, surveillances, self-assessments, and inspections of DOE ORO EM projects, programs, and management systems.
- 3.2.2 Audit: A review of contractor management systems, facilities/equipment, procedures, and training to ensure that contractor activities are conducted in a safe and quality manner, and are compliant with applicable DOE, state, state, federal, and internal requirements.

3.2.3 Findings: Negative practices that are deviations from a requirement or accepted protocol. Findings are categorized as follows:

- (a) Priority I: A finding that represents a situation of imminent danger to worker and/or public safety or environmental protection
- (b) Priority II: A finding that represents a deviation from a regulation or other applicable requirement (DOE Order, internal procedure, contract condition, etc.)
- (c) Priority III: A finding that represents a deviation from Best Management Practices

3.2.4 Inspections: Physical observations of a contractor activity or walkthroughs of a facility to verify that safe working conditions exist and that applicable requirements are being followed during work implementation.

3.2.5 Observations: Minor deviations that do not represent a widespread or systematic weakness, but which need corrective action.

3.2.6 Proficiencies: Positive or proactive practices that the assessed organization has implemented that go above and beyond the typical industry standard practices, which are innovative and unique, or which result in improvements in quality of work.

3.2.7 Self-Assessments: A critical review of EM operations to ensure that roles and responsibilities are being carried out in accordance with applicable requirements using adequate and documented management systems.

3.2.8 Surveillance: A focused review of a contractor activity (program element or field activity) to ensure that the activity is conducted in a safe and quality manner, and is compliant with applicable DOE, state, state, federal, and internal requirements.

3.2.9 Technical Assessment: A review of a contractor cross-cutting program to ensure that it is conducted in a manner consistent with industry standards and requirements, and is managed in a manner that provides effective integration across the EM program

3.2.10 Performance Criteria: Applicable requirements, regulations, DOE Orders, procedures, and/or industry standards that will be used to define assessment expectations, and

3.2.11 Lines-of-Inquiry: Specific expectations developed from the performance criteria that will be used by the assessor to evaluate the adequacy of a particular area they are assessing.

4.0 ROLES AND RESPONSIBILITIES

All applicable roles and responsibilities are defined in the procedure in conjunction with the specific actions that various EM staff have responsibility for implementing.

5.0 PROCEDURE

5.1 Defining the Type and Frequency of Assessments

- 5.1.1 Assessments will be of sufficient type and frequency to ensure that ORO EM funded operations are accomplished in a safe, compliant, cost effective, and quality manner.
- 5.1.2 Table I should be used as a guide for determining the types of assessments required
- 5.1.3 ORO EM Group Leaders, Team Leaders, and the Assistant Manager for EM will be polled routinely by the ORO EM Quality Assurance Manager (QAM) to identify assessment needs. Team Leaders must consult with their staff to ensure that all assessment needs are identified.
- 5.1.4 Assessment needs will translated by the QAM into the ORO EM Assessments Schedule as defined in section 5.2

5.2 Scheduling

- 5.2.1 An assessment schedule will be maintained by the QAM listing planned assessments, assessment type, assessment date(s), assessment team members, and assessment team member review areas.
- 5.2.2 The QAM will revise the schedule routinely to reflect changing conditions,
- 5.2.3 The ORO EM Assessment Schedule will be made available by the QAM to the entire EM staff via hard copy or electronic transmission.

5.3 Planning an Assessment

5.3.1 Audits, Technical Assessments and Self Assessments

- 5.3.1.1 Audits, technical assessments, and self assessments will be performed according to a formal assessment plan that is prepared by the Assessment Team Leader in advance of the assessment.
- 5.3.1.2 The assessment plan must contain the following:
 - (a) Objective: a brief statement of what the assessment is to accomplish,
 - (b) Scope: a brief summary of the topical areas that will be covered during the assessment, and the depth to which each will be covered,
 - (c) Assessment Methods: a listing of the planned date(s) of the assessment, team

members, and areas of review for each team member,

(d) Listing of Performance Criteria (see 3.2.10)

(e) Listing of Lines-of-Inquiry (see 3.2.11)

5.3.1.3 The assessment plan will be documented and submitted by the Assessment Team Leader to the organization to be assessed in advance of the assessment. It is acceptable for the plan to be delivered at the opening meeting of the assessment.

5.3.1.4 The organization to be assessed will be formally notified by the Assessment Team Leader at least two weeks in advance of the assessment. This notification may be transmitted by e-mail or letter distribution; but it must be made at a level such that the management of the assessed organization is fully aware of the impending assessment.

5.3.1.2 Surveillances and Inspections

5.3.2.1 Surveillances and inspections do not require a formal plan, however, the objective and scope of the assessment as well as the performance criteria will be defined by the Assessment Team Leader and communicated, in writing, to the assessed organization before starting the surveillance or inspection.

5.3.2.2 There are no requirements for advanced notification of the assessed organization for surveillances and inspections. Sufficient notice must be provided to ensure the safe access of the assessment team and safe operations of the assessed work.

5.4 Conducting Assessments

5.4.1 An opening meeting will be held with the organization being assessed at the start of each assessment. The Assessment Team Leader is responsible for the conduct of this meeting. During this meeting, the Assessment Team Leader will present the objectives of the assessment, introduce the assessment team staff, specify the approach in which the assessment will be conducted, and will establish communication routes for presentation of findings.

5.4.2 Audits, technical assessments, and self assessments will be conducted in accordance with the assessment plan. Inspections and surveillances will be conducted in a manner which ensures that a thorough review of the performance criteria for the activity is performed.

5.4.3 Assessment team staff must formally document all observations and findings that support adherence to or deviations from Lines-of-Inquiry (self-assessments, audits, technical assessments) or acceptance criteria (inspections and surveillances). Documentation will be

either in the form of checklists, a logbook, or both. All documentation will be of sufficient detail to reconstruct the activity being observed as well as the inspection logic.

- 5.4.4 During the conduct of an assessment, if any activities are noted that represent an imminent threat to worker safety or environmental protection, the assessor will alert the participants of the assessed activity to SHUTDOWN the activity in a safe manner. The assessor will then immediately notify the affiliated DOE and contractor program managers and the DOE Facility Representative.
- 5.4.5 When an assessment is completed, the results of each assessment will be developed into Proficiencies, Findings, and Observations as follows:
- (a) Proficiencies: Positive or proactive practices that the assessed organization has implemented that go above and beyond the typical industry standard practices, which are innovative and unique, or which result in improvements in quality of work.
 - (b) Findings: Negative practices that are deviations from a requirement or accepted protocol. Findings are categorized as follows:
 - (1) Priority I: A finding that represents a situation of imminent danger to worker and/or public safety or environmental protection
 - (2) Priority II: A finding that represents a deviation from a regulation or other applicable requirement (DOE Order, internal procedure, contract condition, etc.)
 - (3) Priority III: A finding that represents a deviation from Best Management Practices
 - (c) Observations: Minor deviations that do not represent a widespread or systematic weakness, but which need corrective action.
- 5.4.6 Following the completion of the assessment and after all results are translated into proficiencies, findings, and observations, a Closeout Meeting must be held with the assessed organization. At this meeting, a summary of the assessment results will be presented by the Assessment Team Leader. The time frame for delivery of the assessment report will also be discussed during this meeting.
- 5.5 Assessment Report
- 5.5.1 All assessments require a formal written report. The report is prepared by the Assessment Team Leader with input from the team staff.
- 5.5.2 The content of the report must include:

- (a) Audit objective,
- (b) Actual scope covered during the assessment,
- (c) Actual methods of implementation including team staff and dates of the assessment, and
- (d) Results including proficiencies, findings, and observations (see section 5.3.4)

5.5.3 A copy of the report will be transmitted to the assessed organization. The submittal must be at a level such that the management of the assessed organization is fully aware of the assessment results. A goal for report submittal should be within 30 days from completion of the audit.

5.5.4 At the time of transmittal, the assessed organization must be informed of the required schedule and format for submittal of a corrective action plan.

5.6 Corrective Actions

5.6.1 A corrective action plan must be submitted to ORO EM by the assessed organization for each finding. Corrective actions plans are not required for observations.

5.6.2 The Assessment Team Lead, or designee, must review submitted corrective actions for completeness, and notify the contractor of acceptability or relative comments.

5.6.3 All audit findings will be formally tracked until corrective actions are verified to be complete.

6.0 QUALIFICATIONS AND TRAINING OF ASSESSMENT STAFF

6.1 Assessments will be performed by personnel that are not directly involved with conducting, supervising, or managing the activity being evaluated. Program Managers, Project Managers, Facility Representatives, other DOE personnel, and support contractors responsible for the activities being evaluated may participate as observers or assessment technical specialists.

6.2 Assessment personnel must be trained in assessment protocols and the specific areas they are evaluating. Qualifications will remain active if they participate in at least three assessments every two years.

6.3 Assessment Team Leaders must have the personal attributes, skills, and experience to manage all phases of the assessment. To maintain team lead status, they must participate in at least three assessments every two years. Additionally, team leads must have successfully

completed a lead auditor training course offered by a nationally recognized institution; such as, International Standards Organization, American Society for Quality, or DOE Headquarters.

7.0 RECORD KEEPING

The audit plan, completed lines-of-inquiry, copies of logbook pages, attendance sheets, audit report, corrective action plan, and other assessment correspondence are considered quality records and will be retained for at least three years in Oak Ridge. Thereafter, final retention will be the responsibility of the Federal Records Archive located in Atlanta, Georgia.

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| U.S. Department of Energy Oak Ridge Operations Environmental Management | Procedure No. <u>EM-4.1</u> Rev. <u>0</u> Assessments Effective Date: _____ Page 9 of 10 |
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| <u>Table 1</u> TYPES OF ASSESSMENTS | | | |
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| ASSESSMENT TYPE | OBJECTIVE | SCOPE | TYPICAL TYPES OF ASSESSMENTS |
| Audits | A review of contractor management systems, facilities/equipment, procedures, and training to ensure that contractor activities are conducted in a safe and quality manner and are compliant with applicable DOE, state, federal, and internal requirements. | Focus is on multiple elements of a program e.g., safety and health, quality assurance, environmental compliance, radiological control, transportation and packaging, and Environmental Management System elements. A sufficient number of activities are reviewed to ensure that a representative view of the program is established. | ES&H program management Assessments and multi-functional appraisals for contractor EM programs, ISO 14000 Environmental Management System implementation audits, analytical laboratory operations audits |
| Surveillances | A focused review of a contractor (program element or field activity) to ensure that the activity is conducted in a safe and quality manner and is compliant with applicable DOE, state, federal, and internal requirements. | One or two activities and a limited set of program elements are reviewed e.g. Quality assurance/quality control and health and safety during a field sampling activity or cleanup operation; contractor records management; radiological control in a laboratory area, etc. | Field sampling surveillances, Remedial action or D&D implementation surveillances, surveillances of selected elements of an Environmental Management System |
| Inspections | Physical observations of a contractor activity or walkthroughs of a facility to verify that safe working conditions exist and that applicable requirements are being followed during work implementation. | Focus is on actual operations with respect to health and safety, quality assurance, and environmental compliance/protection. Inspections are conducted with limited or no notification to ensure that conditions witnessed are truly representative of actual operations. | OSHA no-notice compliance inspections, environmental compliance inspections, treatment plant operations inspections, waste treatment/storage/disposal area inspections |

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| U.S. Department of Energy Oak Ridge Operations Environmental Management | Procedure No. <u>EM-4.1</u> Rev. <u>0</u> Assessments Effective Date: _____ Page 10 of 10 |
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| <u>Table 1</u> TYPES OF ASSESSMENTS | | | |
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| ASSESSMENT TYPE | OBJECTIVE | SCOPE | TYPICAL TYPES OF ASSESSMENTS |
| Technical Assessments | A review of a contractor cross-cutting program to ensure that it is conducted in a manner consistent with industry standards and requirements and is managed in a manner that provides effective integration across the EM program | Focus includes definition of requirements and procedures for contractor technical and business management activities, technical basis for these procedures, technical qualifications of staff, quality control of technical products, methods for ensuring consistency of technical products across varying subcontracts and sites, methods for ensuring continual improvement and refinement as program directions and technical requirements bases change. | Risk Assessment Program assessments, data quality investigations, Pollution Prevention Programs assessments, Mapping and Remote Sensing Program assessments |
| EM Self-Assessments | A critical review of EM operations to ensure that we are carrying out our roles and responsibilities in accordance with applicable requirements using adequate and documented management systems | Focus is on internal DOE EM technical operations, quality assurance/safety management systems, business management systems | Environmental Management System assessments, internal QA program audits, project management audits |